

TAIRA TIMES



Dear Friends of the Taira Times,

The Taira Times is back this month. I hope everybody had a safe Valentine's Day and was able to avoid spreading the flu to your loved ones. This month I am going to take the discussion further and talk about avian flu.

The highly virulent avian flu, which began reemerging in 2006 is become a topic of great concern among public health officials and organizations. Importantly, we will look into how we can protect ourselves.

For most people, birds are the benevolent keepers of the sky, soaring above us with majestic swooping wings and powerful talons that strike fear into the hearts of small prey and the enemies of freedom. However, as the public realized in 2010, animals can carry viruses that infect humans as well. Does H1N1 or swine flu ring a bell? Animals, once a source of joy and wonder, can also be a natural source of the flu. It is possible that many viruses are shared between humans and animals given the proper conditions and mutations.

The influenza virus is very versatile and can mutate according to its host. As reported by the World Health Organization, Highly Pathogenic Avian Flu or H5N1, began infecting humans in as early as 2003. It is usually associated with Southeast Asia, but you would be surprised to know avian flu is present all around the world.

■ The United Nations Gives Warning of a Second Bird Flu Wave

The Food and Agriculture Organization of the United Nations (FAO) issued a warning for a reoccurring outbreak of avian flu, which killed 79 people in 2006.

The FAO declared that investment into the prevention of H5N1 avian flu is indispensable from protecting the public, and every government should make efforts despite the ongoing economic crisis felt around the world.

Avian flu was first confirmed in Hong Kong in 1997 and has since infected over 600 people according to the FAO. Measures to neutralize infected poultry has cost about 20 billion USD between 2003 and 2011. (2013/01/30 Reuters)

Human Infections by Avian Flu: Public Announcement by the World Health Organization

WHO Special Website

* 2013/02/01 Avian Flu World Infections and Causality Report. 615 Incidents, 364 Dead

http://www.who.int/influenza/human_animal_interface/en/

Global Alert and Response (GAR)

* 2013/02/01 Cambodia Ministry of Health Announcement, 5 Infections of H5N1. (1) 8 month old boy on Jan. 9, Recovered (2) 17 year old female on Jan. 11, (3) 35 year old male, Jan. 13, (4) 17 month old girl, Jan. 13, (5) 9 year old girl, Jan. 15 Patients (2)-(5) died from the virus.

http://www.who.int/csr/don/2013_02_01/en/index.html

* 2013/02/08 Cambodia Ministry of Health and WHO Announcement.

The 6th H5N1 infection in Cambodia, a 5 year old girl. Infected on Jan. 25, died Feb. 7.

http://www.cdcmoh.gov.kh/PressRelease/27thpressreleaseAI_Engfinal.pdf





■ Protecting yourself from influenza is best done with the following three daily routines

- 1, Hand hygiene
- 2, Gargling
- 3, **Wearing a mask**



Since most of my readers only know about mask wearing in Japan, but haven't tried themselves, I'll teach you what a mask is and how to use it to protect yourself.

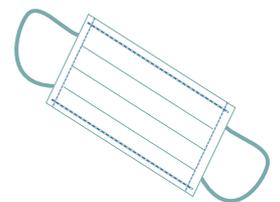
Mask are not just used by surgeons and dentists. Have a look at some ways we use masks.

Household Masks	These masks are used by normal people to protect against getting sick or allergens. They also are used to keep the sinuses moist when you are sick. These masks can be made with many types of materials and come in a variety of sizes.
Healthcare Masks	These masks are usually used in healthcare facilities to prevent infection to patients. They are a necessary piece of equipment for surgical procedures.
Industrial Masks	Masks can also be used in situations where the air can contain dangerous particles or chemicals. Often used in factories, industrial masks protect the wearer from physical contaminants such as powder, smoke or gas.

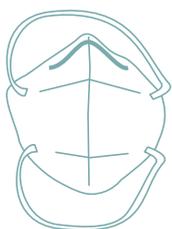
■ Types of Moks

Surgical Masks

Surgical masks can block particles as small as 5µm in diameter. Some newer masks can even reduce the size of passable particles to 1µm. Because viruses are between 0.02 and 0.1 micrometers in diameter, surgical masks cannot protect against viruses on their own. However, a virus is most likely to travel in a water droplet from a sneeze or cough. These droplets are usually big enough to be stopped by the fabric of a mask. For airborne pathogens that are not in droplets such as tuberculosis and the measles virus, an N95 mask should be used.



N95 Masks

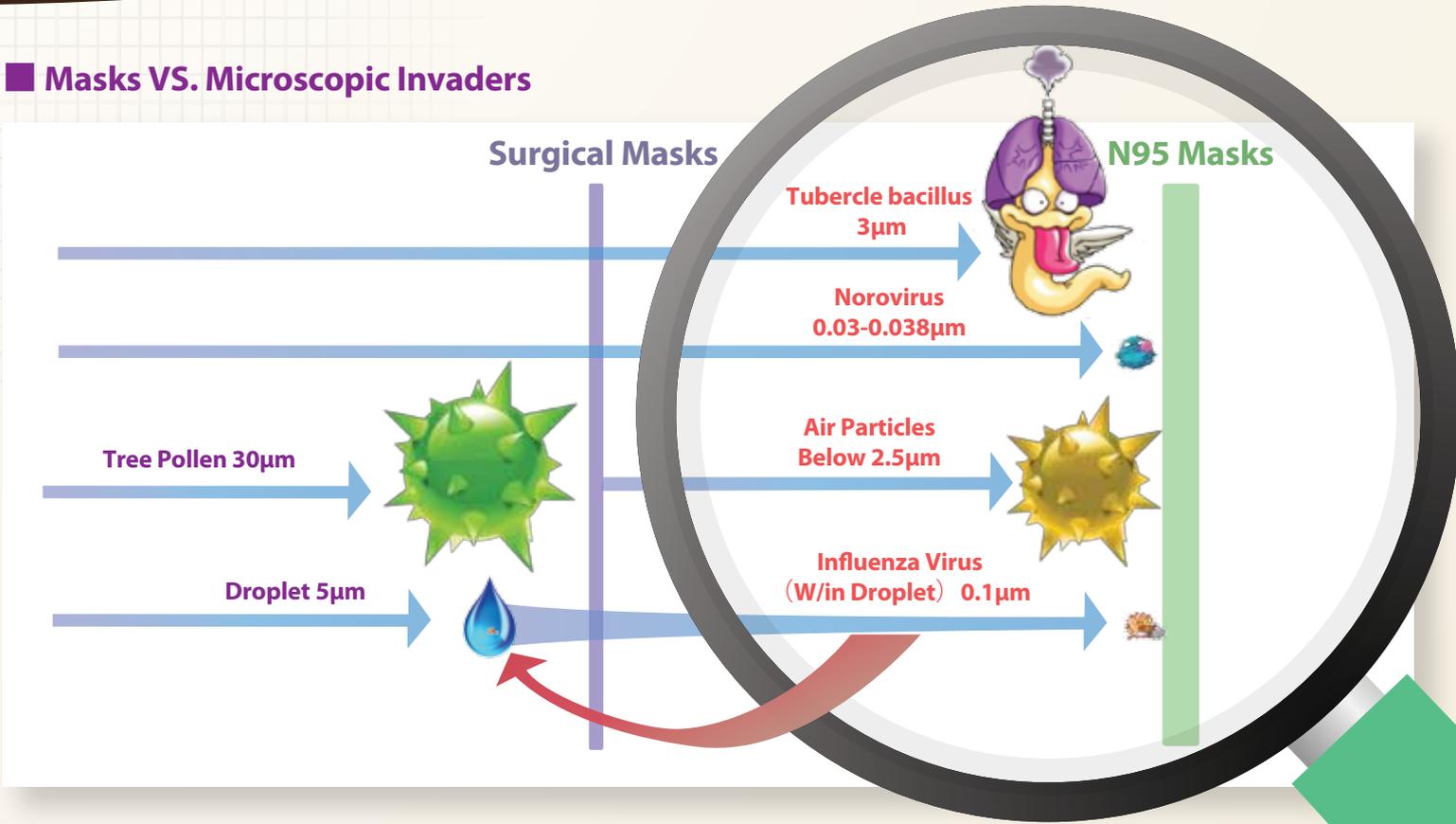


When 5 micrometers is too large, N95 masks can be used. These masks have a much tighter mesh, and block 95% of all particles larger than 0.3 micrometers. In addition, they reduce air leakage to within 10%. By choosing an N95 that securely fits to your face, you can protect yourself from small pathogens such as tuberculosis and measles.





Masks VS. Microscopic Invaders



The Difference Between Surgical Masks and N95 Masks

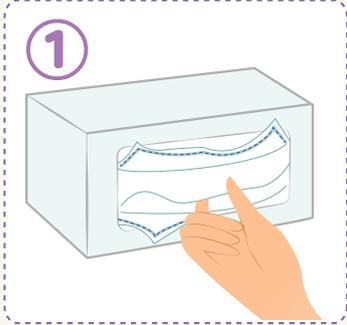
Surgical Masks	N95 Masks
<ul style="list-style-type: none"> • Protects the mucous membranes in your nose and mouth from pathogens • Prevents the spread of pathogens from the wearer's exhalation. 	<ul style="list-style-type: none"> • Traps airborne pathogens • Protects against inhaling viruses and bacteria • Requires testing and checking the fit of the mask





How to wear a Mask

Surgical Masks



1 Check the mask up and down.



2 Bend the center of metallic strip to fit the nose shape.

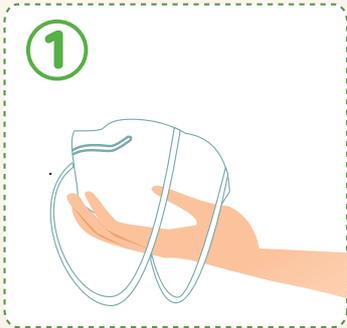


3 Stretch bands on ears and conform metallic strip to nose and cheek contours.



4 Ensure that the mask fully cover the nose, mouth and is stretched gently over the chin and fit snugly over the face.

N95 Masks



1 Pass the hand through the head bands.



2 Put on the mask. The head bands should be around the head and neck.



3 Press the metallic strip on both sides with the foringers and middle fingers of both hands.



4 Cover the mask lightly with both hands. Breathe with deliberation. Air should not leak out from the side of the mask.

Aren't masks interesting? Who knew they could protect you from such tiny particles? Now you know, so tell your friends and wear a mask next time you are feeling ill or riding on public transportation. You will look cool. That's all for this month's episode. And remember, don't let your spit travel into somebody's mouth.

Love,
Taira Sensei

